

Zinc Production



Proposed Rule: Mandatory Reporting of Greenhouse Gases

Under the proposed Mandatory Reporting of Greenhouse Gases (GHGs) rule, owners or operators of facilities that contain zinc production processes (as defined below) and that emit 25,000 metric tons of GHGs per year or more (expressed as carbon dioxide equivalents) from stationary combustion, miscellaneous use of carbonates, and all other source categories (see information sheet on General Provisions) would report emissions from all source categories located at the facility for which emission calculation methods are defined in the rule. Owners or operators would collect emission data; calculate GHG emissions; and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting.

How Is This Source Category Defined?

Under the proposal, zinc production facilities consist of zinc smelters and secondary zinc recycling facilities.

What GHGs Would Be Reported?

The proposal calls for each zinc production facility to report carbon dioxide (CO₂) process emissions from all Waelz kilns and electrothermic furnaces used for zinc production.

In addition, each facility would report GHG emissions for other source categories for which calculation methods are provided in the rule. For example, facilities would report CO₂, nitrous oxide (N₂O), and methane (CH₄) emissions from each stationary combustion unit on site by following the requirements of 40 CFR part 98, subpart C (General Stationary Fuel Combustion Sources). Please refer to the relevant information sheet for a summary of the proposal for calculating and reporting emissions from any other source categories at the facility.

How Would GHG Emissions Be Calculated?

Under the proposal, facilities would calculate CO₂ process emissions using one of two methods, as appropriate:

- Facilities with certain types of continuous emissions monitors (CEMS) in place would report using the CEMS and follow the methodology of 40 CFR part 98, subpart C to report total CO₂ emissions from calcination and fuel combustion. At other facilities, the use of CEMS would be optional.
- Facilities without CEMS would calculate the process CO₂ emissions by determining on a monthly basis the total mass of carbon-containing materials (i.e., zinc-bearing material, flux, electrodes, any other materials) introduced into each kiln and furnace and the carbon content of each material. Carbon content would be determined monthly by either direct measurement or using information provided by the material supplier.

What Information Would Be Reported?

This document was developed for the *Proposed* Mandatory GHG Reporting Rule. For the final document, please visit the *final* [Mandatory Reporting of Greenhouse Gases Rule](#).

In addition to the information required by the General Provisions at 40 CFR 98.3(c), the proposal calls for each annual report to include the following information:

- Annual CO₂ emissions from each Waelz kiln and electrothermic furnace (metric tons) and the method used to estimate these emissions.
- Total number of Waelz kilns and electrothermic furnaces at the facility.
- Annual facility zinc product production capacity (metric tons).
- Number of facility operating hours in calendar year.
- If CO₂ emissions are estimated using carbon input rather than a CEMS, report for each carbon-containing input material consumed or used (other than fuel):
 - Annual material quantity.
 - Annual average of the monthly carbon content determinations for each material.
 - Method used for the determination.

For More Information

This series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the proposed rule. However, these information sheets are not intended to be a substitution for the rule. Visit EPA's Web site (www.epa.gov/climatechange/emissions/ghgrulemaking.html) for more information, including the proposed preamble and rule and additional information sheets on specific industries, or go to www.regulations.gov to access the rulemaking docket (EPA-HQ OAR-2008-0508). For questions that cannot be answered through the Web site or docket, call 1-877-GHG-1188.